Release notes for ENDF/B Development n-050_Sn_119 evaluation

April 26, 2017

- `checkr` Warnings:

  1. A previous error halted parsing of the current section
     MAT=5046, MF= 1, MT=451 (1): Parsing stopped

     ```
     ERROR(S) FOUND IN MAT=5046, MF= 1, MT=451
         SECTION CANNOT BE CHECKED FROM SEQUENCE NUMBER      249 TO      318
     ```

- `checkr` Errors:

  1. A variable is outside the allowed ENDF range
     MAT=5046, MF= 1, MT=451 (0): Variable range

     ```
     ERROR(S) FOUND IN MAT=5046, MF= 1, MT=451
         MOD =     1 OUT OF RANGE     0 -     0          RECORD NUMBER     249
     ```

  2. Missing a section in directory so your directory is messed up. This error will break everything else
     MAT=5046, MF= 2, MT=151 (0): Directory (b)

     ```
     ERROR(S) FOUND IN MAT=5046, MF= 2, MT=151
         SECTION  2/151 NOT IN DIRECTORY                RECORD NUMBER     320
     ```

  3. Missing a section in directory so your directory is messed up. This error will break everything else
     MAT=5046, MF= 3, MT= 1 (0): Directory (b)

     ```
     ERROR(S) FOUND IN MAT=5046, MF= 3, MT=  1
         SECTION  3/  1 NOT IN DIRECTORY                RECORD NUMBER     524
     ```

  4. Missing a section in directory so your directory is messed up. This error will break everything else
     MAT=5046, MF= 3, MT= 2 (0): Directory (b)

     ```
     ERROR(S) FOUND IN MAT=5046, MF= 3, MT=  2
         SECTION  3/  2 NOT IN DIRECTORY                RECORD NUMBER     556
     ```

  5. Missing a section in directory so your directory is messed up. This error will break everything else
     MAT=5046, MF= 3, MT= 4 (0): Directory (b)

     ```
     ERROR(S) FOUND IN MAT=5046, MF= 3, MT=  4
         SECTION  3/  4 NOT IN DIRECTORY                RECORD NUMBER     586
     ```

  6. Missing a section in directory so your directory is messed up. This error will break everything else
     MAT=5046, MF= 3, MT= 16 (0): Directory (b)

     ```
     ERROR(S) FOUND IN MAT=5046, MF= 3, MT= 16
         SECTION  3/ 16 NOT IN DIRECTORY                RECORD NUMBER     608
     ```

  7. Missing a section in directory so your directory is messed up. This error will break everything else
     MAT=5046, MF= 3, MT= 17 (0): Directory (b)

1

```
        ERROR(S) FOUND IN MAT=5046, MF= 3, MT= 17
           SECTION  3/ 17 NOT IN DIRECTORY                    RECORD NUMBER      620
```

8. Missing a section in directory so your directory is messed up. This error will break everything else
   MAT=5046, MF= 3, MT= 22 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=5046, MF= 3, MT= 22
           SECTION  3/ 22 NOT IN DIRECTORY                    RECORD NUMBER      627
```

9. Missing a section in directory so your directory is messed up. This error will break everything else
   MAT=5046, MF= 3, MT= 28 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=5046, MF= 3, MT= 28
           SECTION  3/ 28 NOT IN DIRECTORY                    RECORD NUMBER      640
```

10. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5046, MF= 3, MT= 32 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=5046, MF= 3, MT= 32
           SECTION  3/ 32 NOT IN DIRECTORY                    RECORD NUMBER      650
```

11. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5046, MF= 3, MT= 51 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=5046, MF= 3, MT= 51
           SECTION  3/ 51 NOT IN DIRECTORY                    RECORD NUMBER      658
```

12. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5046, MF= 3, MT= 52 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=5046, MF= 3, MT= 52
           SECTION  3/ 52 NOT IN DIRECTORY                    RECORD NUMBER      680
```

13. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5046, MF= 3, MT= 53 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=5046, MF= 3, MT= 53
           SECTION  3/ 53 NOT IN DIRECTORY                    RECORD NUMBER      700
```

14. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5046, MF= 3, MT= 54 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=5046, MF= 3, MT= 54
           SECTION  3/ 54 NOT IN DIRECTORY                    RECORD NUMBER      718
```

15. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5046, MF= 3, MT= 55 (0): Directory (b)

2

```
ERROR(S) FOUND IN MAT=5046, MF= 3, MT= 55
     SECTION  3/ 55 NOT IN DIRECTORY                 RECORD NUMBER     735
```

16. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5046, MF= 3, MT= 56 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=5046, MF= 3, MT= 56
     SECTION  3/ 56 NOT IN DIRECTORY                 RECORD NUMBER     751
```

17. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5046, MF= 3, MT= 57 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=5046, MF= 3, MT= 57
     SECTION  3/ 57 NOT IN DIRECTORY                 RECORD NUMBER     767
```

18. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5046, MF= 3, MT= 58 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=5046, MF= 3, MT= 58
     SECTION  3/ 58 NOT IN DIRECTORY                 RECORD NUMBER     782
```

19. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5046, MF= 3, MT= 59 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=5046, MF= 3, MT= 59
     SECTION  3/ 59 NOT IN DIRECTORY                 RECORD NUMBER     797
```

20. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5046, MF= 3, MT= 60 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=5046, MF= 3, MT= 60
     SECTION  3/ 60 NOT IN DIRECTORY                 RECORD NUMBER     811
```

21. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5046, MF= 3, MT= 61 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=5046, MF= 3, MT= 61
     SECTION  3/ 61 NOT IN DIRECTORY                 RECORD NUMBER     825
```

22. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5046, MF= 3, MT= 62 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=5046, MF= 3, MT= 62
     SECTION  3/ 62 NOT IN DIRECTORY                 RECORD NUMBER     838
```

23. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5046, MF= 3, MT= 63 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=5046, MF= 3, MT= 63
         SECTION  3/ 63 NOT IN DIRECTORY                RECORD NUMBER     851
```

24. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5046, MF= 3, MT= 64 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=5046, MF= 3, MT= 64
         SECTION  3/ 64 NOT IN DIRECTORY                RECORD NUMBER     864
```

25. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5046, MF= 3, MT= 65 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=5046, MF= 3, MT= 65
         SECTION  3/ 65 NOT IN DIRECTORY                RECORD NUMBER     876
```

26. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5046, MF= 3, MT= 66 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=5046, MF= 3, MT= 66
         SECTION  3/ 66 NOT IN DIRECTORY                RECORD NUMBER     888
```

27. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5046, MF= 3, MT= 67 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=5046, MF= 3, MT= 67
         SECTION  3/ 67 NOT IN DIRECTORY                RECORD NUMBER     899
```

28. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5046, MF= 3, MT= 68 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=5046, MF= 3, MT= 68
         SECTION  3/ 68 NOT IN DIRECTORY                RECORD NUMBER     910
```

29. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5046, MF= 3, MT= 69 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=5046, MF= 3, MT= 69
         SECTION  3/ 69 NOT IN DIRECTORY                RECORD NUMBER     921
```

30. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5046, MF= 3, MT= 70 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=5046, MF= 3, MT= 70
         SECTION  3/ 70 NOT IN DIRECTORY                RECORD NUMBER     931
```

31. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5046, MF= 3, MT= 91 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=5046, MF= 3, MT= 91
     SECTION  3/ 91 NOT IN DIRECTORY                 RECORD NUMBER     941
```

32. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5046, MF= 3, MT=102 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=5046, MF= 3, MT=102
     SECTION  3/102 NOT IN DIRECTORY                 RECORD NUMBER     951
```

33. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5046, MF= 3, MT=103 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=5046, MF= 3, MT=103
     SECTION  3/103 NOT IN DIRECTORY                 RECORD NUMBER     976
```

34. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5046, MF= 3, MT=104 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=5046, MF= 3, MT=104
     SECTION  3/104 NOT IN DIRECTORY                 RECORD NUMBER     991
```

35. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5046, MF= 3, MT=105 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=5046, MF= 3, MT=105
     SECTION  3/105 NOT IN DIRECTORY                 RECORD NUMBER    1003
```

36. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5046, MF= 3, MT=107 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=5046, MF= 3, MT=107
     SECTION  3/107 NOT IN DIRECTORY                 RECORD NUMBER    1014
```

37. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5046, MF= 4, MT= 2 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=5046, MF= 4, MT=  2
     SECTION  4/  2 NOT IN DIRECTORY                 RECORD NUMBER    1031
```

38. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5046, MF= 4, MT= 16 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=5046, MF= 4, MT= 16
     SECTION  4/ 16 NOT IN DIRECTORY                 RECORD NUMBER    1232
```

39. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5046, MF= 4, MT= 17 (0): Directory (b)

5

```
            ERROR(S) FOUND IN MAT=5046, MF= 4, MT= 17
               SECTION  4/ 17 NOT IN DIRECTORY                 RECORD NUMBER    1243
```

40. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5046, MF= 4, MT= 22 (0): Directory (b)

```
            ERROR(S) FOUND IN MAT=5046, MF= 4, MT= 22
               SECTION  4/ 22 NOT IN DIRECTORY                 RECORD NUMBER    1254
```

41. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5046, MF= 4, MT= 28 (0): Directory (b)

```
            ERROR(S) FOUND IN MAT=5046, MF= 4, MT= 28
               SECTION  4/ 28 NOT IN DIRECTORY                 RECORD NUMBER    1265
```

42. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5046, MF= 4, MT= 32 (0): Directory (b)

```
            ERROR(S) FOUND IN MAT=5046, MF= 4, MT= 32
               SECTION  4/ 32 NOT IN DIRECTORY                 RECORD NUMBER    1276
```

43. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5046, MF= 4, MT= 51 (0): Directory (b)

```
            ERROR(S) FOUND IN MAT=5046, MF= 4, MT= 51
               SECTION  4/ 51 NOT IN DIRECTORY                 RECORD NUMBER    1287
```

44. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5046, MF= 4, MT= 52 (0): Directory (b)

```
            ERROR(S) FOUND IN MAT=5046, MF= 4, MT= 52
               SECTION  4/ 52 NOT IN DIRECTORY                 RECORD NUMBER    1315
```

45. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5046, MF= 4, MT= 53 (0): Directory (b)

```
            ERROR(S) FOUND IN MAT=5046, MF= 4, MT= 53
               SECTION  4/ 53 NOT IN DIRECTORY                 RECORD NUMBER    1340
```

46. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5046, MF= 4, MT= 54 (0): Directory (b)

```
            ERROR(S) FOUND IN MAT=5046, MF= 4, MT= 54
               SECTION  4/ 54 NOT IN DIRECTORY                 RECORD NUMBER    1367
```

47. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5046, MF= 4, MT= 55 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=5046, MF= 4, MT= 55
          SECTION  4/ 55 NOT IN DIRECTORY                    RECORD NUMBER    1394
```

48. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5046, MF= 4, MT= 56 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=5046, MF= 4, MT= 56
          SECTION  4/ 56 NOT IN DIRECTORY                    RECORD NUMBER    1421
```

49. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5046, MF= 4, MT= 57 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=5046, MF= 4, MT= 57
          SECTION  4/ 57 NOT IN DIRECTORY                    RECORD NUMBER    1444
```

50. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5046, MF= 4, MT= 58 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=5046, MF= 4, MT= 58
          SECTION  4/ 58 NOT IN DIRECTORY                    RECORD NUMBER    1467
```

51. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5046, MF= 4, MT= 59 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=5046, MF= 4, MT= 59
          SECTION  4/ 59 NOT IN DIRECTORY                    RECORD NUMBER    1490
```

52. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5046, MF= 4, MT= 60 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=5046, MF= 4, MT= 60
          SECTION  4/ 60 NOT IN DIRECTORY                    RECORD NUMBER    1513
```

53. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5046, MF= 4, MT= 61 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=5046, MF= 4, MT= 61
          SECTION  4/ 61 NOT IN DIRECTORY                    RECORD NUMBER    1536
```

54. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5046, MF= 4, MT= 62 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=5046, MF= 4, MT= 62
          SECTION  4/ 62 NOT IN DIRECTORY                    RECORD NUMBER    1559
```

55. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5046, MF= 4, MT= 63 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=5046, MF= 4, MT= 63
         SECTION  4/ 63 NOT IN DIRECTORY                 RECORD NUMBER   1582
```

56. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5046, MF= 4, MT= 64 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=5046, MF= 4, MT= 64
         SECTION  4/ 64 NOT IN DIRECTORY                 RECORD NUMBER   1605
```

57. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5046, MF= 4, MT= 65 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=5046, MF= 4, MT= 65
         SECTION  4/ 65 NOT IN DIRECTORY                 RECORD NUMBER   1628
```

58. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5046, MF= 4, MT= 66 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=5046, MF= 4, MT= 66
         SECTION  4/ 66 NOT IN DIRECTORY                 RECORD NUMBER   1651
```

59. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5046, MF= 4, MT= 67 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=5046, MF= 4, MT= 67
         SECTION  4/ 67 NOT IN DIRECTORY                 RECORD NUMBER   1674
```

60. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5046, MF= 4, MT= 68 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=5046, MF= 4, MT= 68
         SECTION  4/ 68 NOT IN DIRECTORY                 RECORD NUMBER   1697
```

61. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5046, MF= 4, MT= 69 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=5046, MF= 4, MT= 69
         SECTION  4/ 69 NOT IN DIRECTORY                 RECORD NUMBER   1720
```

62. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5046, MF= 4, MT= 70 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=5046, MF= 4, MT= 70
         SECTION  4/ 70 NOT IN DIRECTORY                 RECORD NUMBER   1743
```

63. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5046, MF= 4, MT= 91 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=5046, MF= 4, MT= 91
          SECTION  4/ 91 NOT IN DIRECTORY                RECORD NUMBER    1766
```

64. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5046, MF= 5, MT= 16 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=5046, MF= 5, MT= 16
          SECTION  5/ 16 NOT IN DIRECTORY                RECORD NUMBER    1790
```

65. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5046, MF= 5, MT= 17 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=5046, MF= 5, MT= 17
          SECTION  5/ 17 NOT IN DIRECTORY                RECORD NUMBER    1858
```

66. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5046, MF= 5, MT= 22 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=5046, MF= 5, MT= 22
          SECTION  5/ 22 NOT IN DIRECTORY                RECORD NUMBER    1885
```

67. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5046, MF= 5, MT= 28 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=5046, MF= 5, MT= 28
          SECTION  5/ 28 NOT IN DIRECTORY                RECORD NUMBER    2051
```

68. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5046, MF= 5, MT= 32 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=5046, MF= 5, MT= 32
          SECTION  5/ 32 NOT IN DIRECTORY                RECORD NUMBER    2140
```

69. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5046, MF= 5, MT= 91 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=5046, MF= 5, MT= 91
          SECTION  5/ 91 NOT IN DIRECTORY                RECORD NUMBER    2172
```

- psyche Warnings:

  1. Strength function in URR not in agreement with PSYCHE's expectations
     FILE 2 / SECTION 151 / ISOTOPE MASS = 119. L = 0 / STRENGTH FUNCTION IS 9.85559E-06 / STRENGTH FUNCTION 9.85559E-06 / LIES OUTSIDE LIMITS 1.00000E-05 TO 1.00000E-04 (0): URR str. ftn.

```
FILE  2
   SECTION 151
       ISOTOPE MASS = 119. L =  0
                 STRENGTH FUNCTION IS  9.85559E-06
                              STRENGTH FUNCTION 9.85559E-06
   ... [1 more lines]
```

- `recent` Warnings:

    1. Statistical weight of certain L values were incorrect
       0: RRR goof (a)

       ```
       Calculate Cross Sections from Resonance Parameters (RECENT 2015-1)
       ===============================================================================
       Retrieval Criteria-----------        MAT
       File 2 Mimimum Cross Section- 1.0000E-10 (Standard Option)
       Reactions with No Background-      Output (Resonance Contribution)
       ... [457 more lines]
       ```

- `fudge-4.0` Warnings:

    1. Cross section does not match sum of linked reaction cross sections
       crossSectionSum label 0: total (Error # 0): CS Sum.

       ```
       WARNING: Cross section does not match sum of linked reaction cross sections! Max diff: 0.39%
       ```

    2. Cross section does not match sum of linked reaction cross sections
       crossSectionSum label 1: (z,n) (Error # 0): CS Sum.

       ```
       WARNING: Cross section does not match sum of linked reaction cross sections! Max diff: 0.12%
       ```

- `fudge-4.0` Errors:

    1. The spin statistical weights are off, indicating missing channels
       resonances / resolved / MultiLevel_BreitWigner (Error # 0): badSpinStatisticalWeights

       ```
       WARNING: The spin statical weights for L=1 sums to 2.25, but should sum to 3.0.  You have too few channels for r
       ```

    2. Calculated and tabulated Q values disagree.
       reaction label 22: n[multiplicity:'2'] + Sn118 (Error # 0): Q mismatch

       ```
       WARNING: Calculated and tabulated Q-values disagree: -6362556.560150146 eV vs -6489190. eV!
       ```

    3. Calculated and tabulated Q values disagree.
       reaction label 23: n[multiplicity:'3'] + Sn117 (Error # 0): Q mismatch

       ```
       WARNING: Calculated and tabulated Q-values disagree: -15689983.46554565 eV vs -1.582e7 eV!
       ```

    4. Calculated and tabulated Q values disagree.
       reaction label 24: n + H1 + In118 (Error # 0): Q mismatch

       ```
       WARNING: Calculated and tabulated Q-values disagree: -10005924.43743896 eV vs -9910330. eV!
       ```

    5. Calculated and tabulated Q values disagree.
       reaction label 25: n + H2 + In117 (Error # 0): Q mismatch

       ```
       WARNING: Calculated and tabulated Q-values disagree: -14137978.72976685 eV vs -1.41823e7 eV!
       ```

    6. Calculated and tabulated Q values disagree.
       reaction label 26: Sn120 + gamma (Error # 0): Q mismatch

       ```
       WARNING: Calculated and tabulated Q-values disagree: 9229091.186538696 eV vs 9106590. eV!
       ```

10

7. Calculated and tabulated Q values disagree.
   reaction label 27: n + He4 + Cd115 (Error # 0): Q mismatch

   ```
   WARNING: Calculated and tabulated Q-values disagree: -4281729.650253296 eV vs -4395580. eV!
   ```

8. Calculated and tabulated Q values disagree.
   reaction label 28: H1 + In119_s (Error # 0): Q mismatch

   ```
   WARNING: Calculated and tabulated Q-values disagree: -1460460.702667236 eV vs -1554240. eV!
   ```

9. Calculated and tabulated Q values disagree.
   reaction label 29: H2 + In118_s (Error # 0): Q mismatch

   ```
   WARNING: Calculated and tabulated Q-values disagree: -7781358.336502075 eV vs -7600210. eV!
   ```

10. Calculated and tabulated Q values disagree.
    reaction label 30: H3 + In117_s (Error # 0): Q mismatch

    ```
    WARNING: Calculated and tabulated Q-values disagree: -7880745.789154053 eV vs -7997150. eV!
    ```

11. Calculated and tabulated Q values disagree.
    reaction label 31: He4 + Cd116_s (Error # 0): Q mismatch

    ```
    WARNING: Calculated and tabulated Q-values disagree: 4418495.299972534 eV vs 4.3051e6 eV!
    ```

- `njoy2012`   Warnings:

  1. With the advent of the ENDF-6 format, it is possible to make evaluations that fully describe all the products of a nuclear reaction. Some carry-over evaluations from earlier ENDF/B versions also have this capability, but many do not. This message is intended to goad evaluators to improve things!
     groupr...compute self-shielded group-averaged cross-sections (0): GROUPR/conver (0)

     ```
     ---message from conver---cannot do complete particle production for mt= 16
                       only mf4/mf5 provided
     ```

  2. With the advent of the ENDF-6 format, it is possible to make evaluations that fully describe all the products of a nuclear reaction. Some carry-over evaluations from earlier ENDF/B versions also have this capability, but many do not. This message is intended to goad evaluators to improve things!
     groupr...compute self-shielded group-averaged cross-sections (1): GROUPR/conver (0)

     ```
     ---message from conver---cannot do complete particle production for mt= 17
                       only mf4/mf5 provided
     ```

  3. With the advent of the ENDF-6 format, it is possible to make evaluations that fully describe all the products of a nuclear reaction. Some carry-over evaluations from earlier ENDF/B versions also have this capability, but many do not. This message is intended to goad evaluators to improve things!
     groupr...compute self-shielded group-averaged cross-sections (2): GROUPR/conver (0)

     ```
     ---message from conver---cannot do complete particle production for mt= 22
                       only mf4/mf5 provided
     ```

11

4. With the advent of the ENDF-6 format, it is possible to make evaluations that fully describe all the products of a nuclear reaction. Some carry-over evaluations from earlier ENDF/B versions also have this capability, but many do not. This message is intended to goad evaluators to improve things!
groupr...compute self-shielded group-averaged cross-sections (3): GROUPR/conver (0)

```
 ---message from conver---cannot do complete particle production for mt= 28
                        only mf4/mf5 provided
```

5. With the advent of the ENDF-6 format, it is possible to make evaluations that fully describe all the products of a nuclear reaction. Some carry-over evaluations from earlier ENDF/B versions also have this capability, but many do not. This message is intended to goad evaluators to improve things!
groupr...compute self-shielded group-averaged cross-sections (4): GROUPR/conver (0)

```
 ---message from conver---cannot do complete particle production for mt= 32
                        only mf4/mf5 provided
```

6. With the advent of the ENDF-6 format, it is possible to make evaluations that fully describe all the products of a nuclear reaction. Some carry-over evaluations from earlier ENDF/B versions also have this capability, but many do not. This message is intended to goad evaluators to improve things!
groupr...compute self-shielded group-averaged cross-sections (5): GROUPR/conver (0)

```
 ---message from conver---cannot do complete particle production for mt= 91
                        only mf4/mf5 provided
```

12